

# Resinex™ K-10

## Strong acidic cation exchange resin

**Resinex™ K-10** is a high purity, premium grade, strongly acidic cation exchange resin to provide an outstanding resistance to physical breakdown and oxidation. The high capacity achieved in demineralisation makes it suitable for most standard industrial water treatment applications. Together with optimisation of regenerant consumption, **Resinex™ K-10** will allow you to obtain a high quality process water in economical manner.

The selected bead size distribution is especially adapted for all modern counter-current systems.

### Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	Gel-type, amber, spherical beads
Functional group	Sulfonic acid
Whole bead count	95% min.
Ionic form, as shipped	Na <sup>+</sup>
Bead size	0.42 - 1.25 mm
Uniformity coefficient	1.6 max.
Bulk density, as shipped	820 kg/m <sup>3</sup>
Real density	1.31 g/cm <sup>3</sup>
Water retention	45 - 48%
Total capacity (Na <sup>+</sup> form)	2.10 eq/l min.
Volume change Na <sup>+</sup> → H <sup>+</sup>	10% max.
Stability, temperature	120°C max.
Stability, pH	0 - 14

### Standard Design Conditions

Bed depth	> 700 mm
Service flow rate	8 - 55 BV/h
Backwash expansion	50 - 75%

### Key Features and Benefits

- **High Integrity Beads**  
Excellent resistance to mechanical degradation ensures an extended life-time
- **Extended Operating Capacity**
- **High Crosslinked**  
Higher mechanical and chemical resistance
- **Selected Bead Size**  
Lower pressure drop and regenerant consumption

### Typical Applications

- Demineralisation when used in combination with **Resinex™ A-7**
- Condensate treatment when used in combination with **Resinex™ A-7**

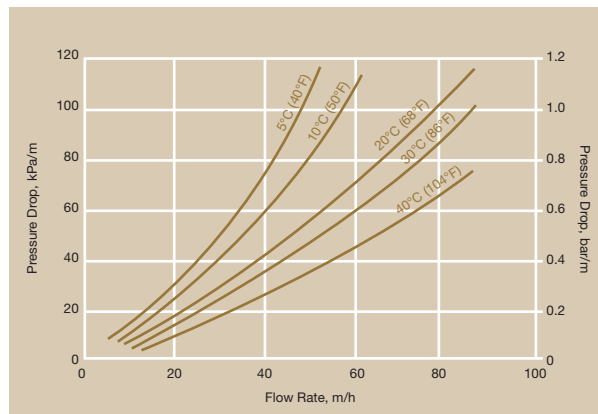
### Standard Packaging

- 25 lit. PE valve bag
- 1000 litre big bag

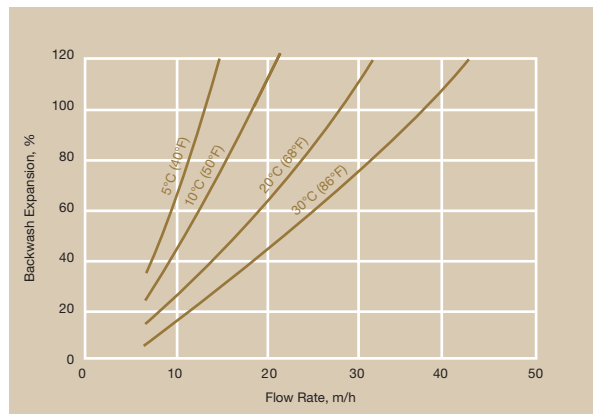
## Resinex™ K-10

Strong acidic cation exchange resin

### Pressure Drop



### Backwash Expansion



### Standard Regeneration Parameters

### Co-Flow

### Counter-Flow

Concentration	8% HCl	5% HCl
Level	60-150 g/l	45-70 g/l
Flow rate regenerant	4-6 BV/h	5-8 BV/h
Contact time regenerant	30-60 min.	20-40 min.
Flow rate slow rinse	2-20 BV/h	5-20 BV/h
Slow rinse water required	8-15 BV	3-6 BV
Flow rate fast rinse	20-40 BV/h	20-40 BV/h
Fast rinse water required	8-15 BV	3-6 BV

### Product Packing



25 lit. polyethylene valve bag  
48 bags per pallet



Polypropylene FIBC's  
(big bag), 1.000 lit.



**NOTICE** Jacobi Carbons reserves the right to change product specifications without prior notification. The information contained in this datasheet is intended to assist a customer in the evaluation and selection of products supplied by Jacobi Carbons. The customer is responsible for determining whether products and the information contained in this document are appropriate for the customers use. Jacobi Carbons assumes no obligation or liability for the usage of the information in this datasheet, no guarantees or warranties, expressed or implied, are provided. Jacobi Carbons disclaims responsibility and the user must accept full responsibility for performance of systems based on this data.

**CAUTION** Strong oxidizing agents such as nitric acid can react violently with ion exchange resins and cause explosive type reactions. Before using strong oxidants, consult sources knowledgeable in the handling of these materials.



#### SWEDEN

Jacobi Carbons AB  
Varvsholmen  
SE-392 30 Kalmar  
Phone: +46-480-417550  
FAX: +46-480-417559  
Email: info@jacobi.net

#### FINLAND

Jacobi Carbons AB (SS)  
Ruoholahdenkatu 8  
SF-00180 Helsinki  
Phone: +358-9-643602  
FAX: +358-9-642900  
Email: infofin@jacobi.net

#### GERMANY

Jacobi Carbons GmbH  
Feldbergstraße 21  
D-60323 Frankfurt/Main  
Phone: +49-69-719107-0  
FAX: +49-69-719107-20  
Email: infode@jacobi.net

#### UNITED STATES

Jacobi Carbons, Inc.  
1335 Dublin Road Suite 217D  
Columbus, OH 43215  
Phone: +1-215-546-3900  
FAX: +1-215-546-9921  
Email: infous@jacobi.net

#### UNITED KINGDOM

Jacobi Carbons Ltd  
E12 Croft Court, Moss Estate  
WN73PT Leigh, Lancashire  
Phone: +44-1942-670600  
FAX: +44-1942-670605  
Email: infouk@jacobi.net

#### MALAYSIA

Jacobi Carbons (Asia) Sdn Bhd  
Lot 12070-F, Jalan Usahajaya,  
Permatang Tinggi, 14100, Penang  
Phone: +60-4-5882122  
FAX: +60-4-5886122  
Email: infoasia@jacobi.net



www.resinex-ixr.com  
www.jacobi.net